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09/660,093	09/12/2000	Mehmet Oguz Sunray		7323

7590   12/03/2003

Docket Administrator (Room 3C-512)
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EXAMINER
KADING, JOSHUA A

ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 12/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-14_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-14_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on _17 July 2002_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.
37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific
reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)	4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) ☐ Notice of Informal Patent Application (PTO-152)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _2_ .	6) ☐ Other: .

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

Page 1, line 7 of the specification makes reference to another patent application.

5   However, the serial number for that patent application was left blank.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

10   form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15

Claims 1-4 and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by

Tiedemann et al. (WO 98/35514).

In regard to claim 1, Tiedemann et al. disclose "a method for partitioning code

20   space in a communication system, comprising the step of:

dividing a code space into at least two subspaces, where codes in the first

subspace are assigned to at least one user at a time for a communication session and

where all of the codes in the second subspace are assigned to one user (page 5, lines

9-10 show a code space being divided into at least two subspaces; page 7, lines 6-13

25   show that one remote station or user is assigned to the primary code channel which is

taken to be the same as the second subspace, and the secondary code channels are

taken to be the first subspace)."

In regard to claim 2, Tiedemann et al. disclose "the method of claim 1, wherein

5   codes are dynamically assigned between the at least first and second subspaces (page

8, lines 3-8 where both the primary and secondary channels use different codes as is

known in the art; a user is initially using the code of the primary channel but must be

assigned into the secondary channels or be dynamically assigned a code to

accommodate an increase in user data flow)."

10

In regard to claim 3, Tiedemann et al. disclose "the method of claim 2, wherein a

minimum number of codes are provided to the first subspace (it is inherent that there be

a minimum number of codes (i.e. a minimum of one code) provided to the first subspace

because the subspace in a code space system needs the codes in order to transmit

15   data and without the minimum number of codes the subspace would be a waste)."

In regard to claim 4, Tiedemann et al. disclose "the method of claim 2, wherein a

minimum number of codes are provided to the second subspace (it is inherent that there

be a minimum number of codes (i.e. a minimum of one code) provided to the second

20   subspace because the subspace in a code space system needs the codes in order to

transmit data and without the minimum number of codes the subspace would be a

waste)."

In regard to claim 6, Tiedemann et al. disclose "the method of claim 1, wherein

the first subspace is used for voice communication (page 5, lines 16-17 and page 7,

lines 14-16 where the data type of the first subspace (or secondary channels) "can be of

5   various types" which includes the voice activity described on page 5)."

In regard to claim 7, Tiedemann et al. disclose "the method of claim 1, wherein

the second subspace is used for data communication (page 7, lines 10-13 where the

primary code channel is the second subspace)."

10

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set
15   forth in section 102 of this title, if the differences between the subject matter sought to be patented and
the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

20   Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Tiedemann et al. in view of Gilhousen (U.S. Patent 5,751,761).

In regard to claim 5, Tiedemann et al. disclose the method of claim 2. However,

Tiedemann et al. lack "a plurality of codes are unassigned to a subspace and are

25   available for assignment to either subspace." Gilhousen however, discloses "a plurality

of codes are unassigned to a subspace and are available for assignment to either

subspace (col. 12, lines 20-40 where the BUSY list corresponds to unassigned codes and assigning an appropriate code to the requesting channel says that any channel from any subspace may request a code from the BUSY list)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the

5   unassigned codes with the method of claim 2 for the purpose of having control over the assignment of codes to particular channels. The motivation for this being to accommodate channel requests for codes efficiently.

Claims 8-11 and 13-14 are rejected under 35 U.S.C. 103(a) as being

10   unpatentable over Tiedemann et al. in view of Schilling (U.S. Patent 5,410,568).

In regard to claim 8, Tiedemann et al. disclose "a method for partitioning code space in a communication system, comprising the step of:
 dividing a code space into at least two subspaces, where codes in the first

15   subspace are assigned to at least one user at a time for a communication session while all of the codes in the second subspace are assigned to one of a plurality of users...(page 5, lines 9-10 show a code space being divided into at least two subspaces; page 7, lines 6-13 show that one remote station or user is assigned to the primary code channel at a time which is taken to be the same as the second subspace,

20   and the secondary code channels are taken to be the first subspace)."
 However, Tiedemann et al. lack "...on a time shared basis." Schilling however, discloses "...on a time shared basis (col. 2, lines 10-20 and figures 8 and 10 where the

signal is a coded signal with time shared slots)." It would have been obvious to one with

ordinary skill in the art at the time of invention to include the time shared basis with the

rest of the method for the purpose of having little or no interference between users. The

motivation being allowing full duplex communication between a base station and user.

5

In regard to claim 9, Tiedemann et al. and Schilling disclose the method of claim

8. However, Schilling lacks "codes are dynamically assigned between the at least first

and second subspaces." Tiedemann et al. however, further disclose "codes are

dynamically assigned between the at least first and second subspaces (page 8, lines 3-

10   8 where both the primary and secondary channels use different codes as is known in

the art; a user is initially using the code of the primary channel but must be assigned

into the secondary channels or be dynamically assigned a code to accommodate an

increase in user data flow)." It would have been obvious to one with ordinary skill in the

art at the time of invention to include the dynamically assigned codes with the method of

15   claim 8 for the same reasons and motivation as in claim 8.

In regard to claim 10, Tiedemann et al. and Schilling disclose the method of claim

9. However, Schilling lacks "a minimum number of codes are provided to the first

subspace." Tiedemann et al. however further disclose "a minimum number of codes are

20   provided to the first subspace (it is inherent that there be a minimum number of codes

(i.e. a minimum of one code) provided to the first subspace because the subspace in a

code space system needs the codes in order to transmit data and without the minimum

number of codes the subspace would be a waste)." It would have been obvious to one

with ordinary skill in the art at the time of invention to include minimum number of codes

with the method of claim 9 for the same reasons and motivation as in claim 9.

5   In regard to claim 11, Tiedemann et al. and Schilling disclose the method of claim

9. However, Schilling lacks "a minimum number of codes are provided to the second

subspace." Tiedemann et al. however further disclose "a minimum number of codes are

provided to the second subspace (it is inherent that there be a minimum number of

codes (i.e. a minimum of one code) provided to the second subspace because the

10   subspace in a code space system needs the codes in order to transmit data and without

the minimum number of codes the subspace would be a waste)." It would have been

obvious to one with ordinary skill in the art at the time of invention to include minimum

number of codes with the method of claim 9 for the same reasons and motivation as in

claim 9.

15

In regard to claim 13, Tiedemann et al. and Schilling disclose the method of claim

8. However, Schilling lacks "the first subspace is used for voice communication."

Tiedemann et al. however, further disclose "the first subspace is used for voice

communication (page 5, lines 16-17 and page 7, lines 14-16 where the data type of the

20   first subspace (or secondary channels) "can be of various types" which includes the

voice activity described on page 5)." It would have been obvious to one with ordinary

skill in the art at the time of invention to include the first subspace used for voice

communication with the method of claim 8 for the same reasons and motivation as in

claim 8.

In regard to claim 14, Tiedemann et al. and Schilling disclose the method of claim

5   8. However, Schilling lacks "the second subspace is used for data communication."

Tiedemann et al. however, further disclose "the second subspace is used for data

communication (page 7, lines 10-13 where the primary code channel is the second

subspace)." It would have been obvious to one with ordinary skill in the art at the time of

invention to include the second subspace used for data communication with the method

10   of claim 8 for the same reasons and motivation as in claim 8.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Tiedemann et al. and Schilling as applied to claim 9 above, and further in view of

Gilhousen.

15

In regard to claim 12, Tiedemann et al. and Schilling disclose the method of claim

9. However, Tiedemann et al. and Schilling lack "a plurality of codes are unassigned to

a subspace and are available for assignment to either subspace." Gilhousen however,

discloses "a plurality of codes are unassigned to a subspace and are available for

20   assignment to either subspace (col. 12, lines 20-40 where the BUSY list corresponds to

unassigned codes and assigning an appropriate code to the requesting channel says

that any channel from any subspace may request a code from the BUSY list)." It would

have been obvious to one with ordinary skill in the art at the time of invention to include

the unassigned codes with the method of claim 9 for the purpose of having control over

the assignment of codes to particular channels. The motivation for this being to

accommodate channel requests for codes efficiently.

5

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Joshua Kading whose telephone number is (703) 305-

0342. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

10   supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone number

for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (703) 305-

3900.

15

Joshua Kading
Examiner
Art Unit 2661

JK
November 26, 2003

KENNETH VANDERPUYE
PRIMARY EXAMINER